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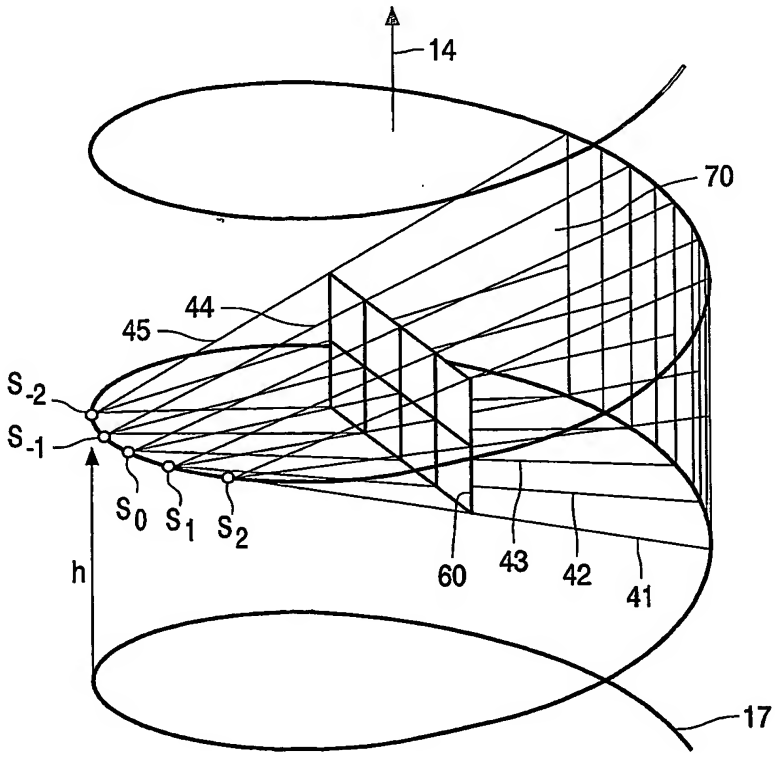
(54) Title: COMPUTER TOMOGRAPHY METHOD FOR A PERIODICALLY MOVING OBJECT



(57) Abstract: The invention relates to a computer tomography method in which a periodically moving object, in particular an organ of the body, is irradiated by a cone-shaped beam cluster (4) along a trajectory which runs on a cylindrical surface. The radiation transmitted through the object is measured by means of a detector unit (16), and at the same time the periodic movement of the object is recorded. In order to reconstruct the absorption distribution of the object, the measured values or the corresponding beams are rebinned to form a number of parallel projections, where for each of these projections a measured value is determined whose beam irradiates the object. The point in time at which this measured value was acquired is allocated to the respective projection. For the reconstruction, which may for example be carried out using a filtered back-projection, only projections whose allocated points in time lie within a predefined, specific time range (H1) within a period of the object movement are used.

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